DOCUMENT RESUME

ED 250 804 EA 017 312

AUTHOR Gottfredson, Gary D.
TITLE Assessing School Climate in Prevention Program Planning, Development, and Evaluation.
SPONS AGENCY National Inst. for Juvenile Justice and Delinquency Prevention (Dept. of Justice/LEAA), Washington, D.C.; National Inst. of Education (ED), Washington, DC.
PUB DATE 24 Aug 84
NOTE 24p.; Paper presented at the Annual Meeting of the American Psychological Association (Toronto, Ontario, Canada, August 24-28, 1984). Some figures may not reproduce due to light, small print.
PUB TYPE Reports - Evaluative/Feasibility (142) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Behavior Problems; Delinquency Prevention; *Discipline; Discipline Policy; *Discipline Problems; *Educational Environment; Elementary Secondary Education; *Evaluation Methods; Evaluation Utilization; Program Design; Program Evaluation; Questionnaires; Site Analysis
IDENTIFIERS *Effective Schools Battery; National Institute of Education; Office of Juvenile Justice Delinquency Prevention

ABSTRACT

This paper describes the presentations made at a symposium of behavioral scientists conducting research on school disorder and delinquency prevention. The application of a climate assessment battery in organizational development and the evaluation of disciplinary programs in schools is described. The "Effective Schools Battery" (ESB) produces climate profiles to diagnose school problems, suggest improvement ideas, and monitor progress, based on questionnaires completed by teachers and students. Profiles of illustrative schools are shown, and the implications of these assessments for program design are discussed. Selected results from the evaluation of the U.S. Office of Juvenile Justice and Delinquency Prevention (OJJDP) program are presented to illustrate the application of the ESB in program evaluation. Finally, the implications of knowledge gained from evaluation of the OJJDP program are contrasted with the recently emerged "get tough" approach to school discipline. (TE)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED250804

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Gary D. Gottfredson

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Assessing School Climate in Prevention Program Planning, Development, and Evaluation

Gary D. Gottfredson

Center for Social Organization of Schools
The Johns Hopkins University
Baltimore, Maryland 21218

Paper prepared for presentation at the meeting of the American Psychological Association, Toronto, 24 August 1984. Preparation of this paper was aided by support from the National Institute of Education, U.S. Department of Education, and the National Institute for Juvenile Justice and Delinquency Prevention, U.S. Department of Justice. The opinions expressed are the author's, and they do not necessarily reflect the position or policy of either institute.

EA 017 312

Assessing School Climate in Prevention Program Planning, Development, and Evaluation

Introduction to the Symposium

Gallup polls indicate that for each year in the past decade school discipline has been the public's number one concern about education. During that decade, both the National Institute of Education and the U.S. Office of Juvenile Justice and Delinquency Prevention have undertaken programs of research on school disorder and delinquency prevention. The participants in today's symposium (Cook, 1984; Hyman, 1984; D. C. Gottfredson, 1984) have been among the most active behavioral scientists conducting this research. Their presentations cover some recent applied research results in this area, and they comment on the ways the Federal government has approached these problems and how it might pursue programmatic activities in the future.

Is Getting Tough All It Takes?

A recent report by the Cabinet Council on Human Resources Working Group on School Violence/Discipline (1984) implies that order has deteriorated in the public schools, and it fosters notions that (a) school disorder is an acute crisis, (b) problems of school disorder can be solved without the expenditure of money, and (c) the simple expedient of freeing the hands of school personnel to deal with discipline will solve the problems. This report and related adminis-

tration views have received widespread attention in the media (e.g., Pear, 1984; Weisman, 1984). As I have explained elsewhere (G. Gottfredson, 1984) these notions are misleading. Rhetoric and admonitions to try harder will not help much. Expending the effort to carefully monitor school orderliness and carefully implement sound school improvement programs will help. Implementing effective school improvements in the schools that need them will entail the expenditure of money and the leadership of school personnel and others. Expectations that discipline problems in our most troubled schools can be solved without resources are unrealistic. In contrast to the "get tough" perspective which suggests that the simple and straightforward expedient of freeing school officials to manage discipline as they wish--the presenters illustrate that simple expedients are unlikely to be effective. Rather than unbridled discretion, structures that provide more effective school responses to student conduct are needed.

The presentations cover both primary prevention approaches involving environmental change and intervention directed at the remediation of difficulties with troublesome students. Today's presentations illustrate that the design of measurement, intervention, and evaluation procedures have developed considerably as a result of the Federal research and development initiatives and suggest that additional research and development are needed to solve problems of

adoption and implementation of effective techniques. The pursuit of easy "solutions" such as reducing procedural hindrances to the increased use of suspension should not be allowed to misdirect attention away from research on school organization and the development of improved psychological technologies.

Assessing School Climate in Prevention Program Planning, Development, and Evaluation

To start the symposium off, I will describe the application of a climate assessment battery in organizational development and the evaluation of disciplinary programs in schools. This battery is the descendent of research using the NIE Safe School Study data, and was developed and field tested as part of the evaluation of a school-based delinquency prevention program sponsored by OJJDP. The use of this school assessment tool for organizational diagnosis, intervention design, and evaluation are illustrated by drawing on examples from research sponsored by OJJDP and NIE.

The organizational assessment instruments, known as the Effective School Battery (ESB; G. D. Gottfredson, in press b), are based on questionnaires completed by teachers and students. I will show profiles of illustrative schools and discuss the implications of these assessments for program design. Then, I will present selected results from the evaluation of OJJDP's school-based delinquency prevention

program to illustrate the application of the ESB in program evaluation.

Finally, I will contrast the implications of the knowledge gained from the evaluation of the OJJDP program with the recently emerged "get tough" approach to school discipline.

The Effective School Battery (ESB)

The ESB produces climate profiles to diagnose school problems, suggest improvement ideas, and monitor progress. The profiles tell how safe a school is, whether morale is high or low, whether students and teachers find the school a pleasant place to be, and whether there is tension between administrators and teachers. In all, the ESB describes the school in terms of 34 specific aspects of school climate and teacher and student characteristics. The development and psychometric properties of the ESB are spelled out in its manual (G. D. Gottfredson, in press b). You should see that manual for a summary of the research that led to its development. Today, I will give you a sense for what the results of a school assessment using the ESB look like and how they can be used.

Figures 1 through 4 show the profiles for one urban school assessed using the ESB. This is a junior high school in trouble. It is an urban school located in a working

class area. Last year one student was shot to death in this school, and carrying weapons in the school is commonplace. Fights occur all the time. The principal is hanging on until retirement. Far from being on top of the school's problems, the principal is not sure what the typical daily attendance is when asked. (It is low.)

An incident, most people called it a riot, occurred here a few years ago, and central administrators and community members alike fear more trouble. Students--and young people who are not students--roam throughout the school virtually at will. Staff turnover is high. Many teachers put in for transfers each year. The principal is not without some leadership potential--he is involved in a principal's association actively working to block the school board's plans for a principal evaluation scheme.

Let's examine this school's climate profiles. The teacher psychosocial climate profile summarizes what teachers say about the school. It shows that both Safety and Morale are very low. The profile suggests that morale is a major problem. This interpretation is reinforced by the high staff turnover rate mentioned earlier. The low Morale score suggests that it will probably be very difficult to work with the staff on school improvement programs, but the low Safety scale and the generally low elevation of the entire profile imply that a school improvement program is

desperately needed. None of the teacher psychosocial climate scales is above average, and three of the more specific climate measures are in the low or very low range.

The pattern seen in this profile suggests inaction rather than conflict between faculty and administration. The Planning and Action score is low, suggesting that little effort is expended on school improvement activities.

The student psychosocial climate profile summarizes what students say about the school. It confirms the interpretation that this school is a relatively uncomfortable place. Of the two general climate scales, Safety is in the low range, and Respect for Students in the moderately low range. Like teachers, students see little action: the Planning and Action score is low.

The profile of teacher population characteristics describes the teachers in the school. It is marked by very low Job Satisfaction, and by low scores on Personal Security, Classroom Orderliness, and Professional Development.

The profile of student characteristics shows that the parents of these students are about as educated as parents in the average school. The most striking features of the student characteristics are the very low score on Social Integration and the very low score on Avoidance of Punishment. The average student is apparently alienated and is

punished often in school. Other evidence confirms that students are often punished--there were 84 disciplinary removals (informal suspensions for up to three days) per 100 students in the year the school was assessed.

Taken together, the profiles for our illustrative school imply that this school has multiple problems, that staff are demoralized and students alienated. Anyone trying to help this school improve its climate will have to kindle a fire under the administration and staff, help set priorities for beginning school improvements, and achieve at least some small early successes to convince people that something can be done to improve matters.

When these profiles were discussed with the school staff, teachers easily named discipline as the number one problem. And although the student psychosocial climate profile suggested that clarity of the rules was at the high end of the average range, discussions with teachers and administrators revealed that they did not know what the rules were.

Using the ESB to Assess School Improvement Programs

In another paper in this symposium, Denise Gottfredson (1984) will illustrate how the ESB can be used to assess the effects of school improvement interventions. Because she will be showing you summary data rather than detailed school profiles, it may be useful now to review the way ESB pro-

files can be used to describe changes in school climate resulting from new programs or other events that can influence climate. Figures 5 through 8 depict the climate of one school at two points in time.

This is a junior high school with about 700 students located in a mid-sized industrial city. The school was desegregated a few years ago and its students are now 67% white. The school is probably still settling down after this recent court-ordered desegregation and all the city's schools are feeling the pinch of tight budgets; the voters have turned down referenda for taxes to support education in recent years. The principal is a calm and self-assured person who has captained this school for almost 20 years; the vice-principal is a stern disciplinarian who suspends students who look cross-eyed in the hall. The school's suspension rate is very high.

In the spring of 1981 when this school was first assessed, the teacher psychosocial climate profile's elevation was a bit on the low side of average, suggesting that the school was slightly uncomfortable. The Safety scale is in the low portion of the average range, suggesting that this school has occasional problems in this area, but that they are not of great magnitude.

Several of the more specific climate scales are moderately low. These include (a) the Planning and Action scale

(the principal has been in the school a long time and may not be anxious to bring about changes), (b) the Smooth Administration scale (the faculty and counselors say changes are needed in the way the vice principal handles discipline), (c) the Race Relations scale (the school is just settling down after the recent court-ordered desegregation), and (d) the Student Influence scale (the school has no student council and no one seems concerned about that). Given the talk one hears about the need to get a tax issue approved by the voters and the lack of amenities such as basketballs, it is interesting that the Resources scale is not lower than it is, but then resources like paper and pencils do not seem to be in short supply, and the school has a nice large library.

Time limitations preclude a detailed examination of the details of the remaining profiles (see Gottfredson, in press b, for a discussion), but the profile of student population characteristics does present some interesting complexities. Average Parental Education is moderately high, and several indicators of personal integration are near the high end of the average range--Positive Peer Association, Educational Expectation, Social Integration, Belief in Rules, and Interpersonal Competency. But other measures of student characteristics are moderately low--Attachment to School, Involvement, Positive Self-Concept, and School Rewards. This pattern suggests that something about the school environment

is dragging down students' liking for school and their self-concepts. This interpretation seems to fit: The School Rewards scale is low, other evidence implies that a high proportion of the school's students have been suspended, and there are very few extracurricular activities available. School staff think a large part of the explanation of the low score on Positive Self-Concept is the way disciplinary problems are handled by the vice principal. This hypothesis may or may not be correct, but it is worth exploration.

Some important changes occurred in this school between 1981 and 1983 when the school was again assessed with the ESB in the spring. The vice principal left to take another job and was replaced by a vice principal with a disciplinary philosophy more congenial to the other staff and the central administration. The suspension rate plummeted. The voters passed a school finance issue during the 1981-82 academic year. A graduate student doing an internship in community psychology took on the school as an action research project and was given an office in the school. The intern had a small grant to support the school improvement activities. He devoted lots of energy to his school improvement project, and he held meetings with faculty and students to plan for school improvement. The faculty and administration used the ESB assessments conducted in 1981 to develop plans for school improvement. A student council was formed, and stu-

dents launched some fund raising activities that enabled them to buy athletic equipment. Dances were held. An in-school suspension room was created, and some changes were made in reading curricula for students with difficulties.

The overall elevation of the teacher psychosocial climate profile is noticeably higher in 1981. Of the two general climate measures, Safety is more than two standard errors of measurement higher in 1983 than in 1981, and Morale is higher--but only one and a fifth standard errors higher. Two of the more specific climate scales also show evidence of improvement. The Smooth Administration scale score has increased from the 27th to the 65th percentile, and the increase exceeds the standard error of difference by a factor of 2.37. Teachers clearly felt more comfortable with the administration and that greater cooperation between administration and teachers existed in 1983 than they did in 1981.

There are no notable changes in the student psychosocial profile or in the profile of teacher characteristics between 1981 and 1983. But a number of differences in the measures of student population are noteworthy. Social Integration, Attachment to School, Belief in Rules, and Positive Self-Concept all increased significantly (by simple t-tests). In other words, student alienation has decreased, liking for school has gone up, respect for conventional rules is up, and students view themselves more positively.

This is a portrait of strong positive change in the characteristics of this school's students. One gets the overall picture of a school that is improving. It is not clear whether these changes should be attributed solely to the school improvement program, especially since there was an important change in the school's administration and a school revenue issue was passed by the voters. But the pattern of results is consistent with this interpretation.

Using the ESB to Plan and Evaluate Prevention Programs

A rational approach to planning school improvement to reduce disorder would entail the following steps:[1]

1. Diagnosis. Use the ESB to assess the school's climate and pinpoint the most important problems. Then try to determine why the problems exist. If, for example, a climate profile implies that school safety is low, search the profiles and ask probing questions to find the causes: Are the school's rules clear to teachers and students? Is there much teacher-administration tension? Is morale so low that few people feel they can count on others in the school to help them improve discipline?

---

1. My colleagues and I have spelled out in greater detail elsewhere how to plan, implement, and evaluate school improvement programs (G. D. Gottfredson, in press a; G. D. Gottfredson, Rickert, D. C. Gottfredson, & Advani, in press).

2. Formulate goals and objectives. Be specific about the changes in school climate you want to bring about. Base your goals and objectives on the diagnosis. If your diagnosis is that the school is unsafe because of a lack of clear rules and firm rule enforcement, your goal might be to increase safety by making sure the rules are understood by all and consistently and fairly enforced.

3. Examine the research on potential programs. Avoid the trap of plunging into a new program just because it sounds like a good idea. Make sure the programs you put in place are clearly and directly aimed at your goals and objectives and have been shown to bring them about in other schools.

4. Identify obstacles and resources. When you introduce innovation, you are changing the status quo in a school. For a while, some things become harder to do while other things become easier. You must develop a concrete plan that everyone agrees is feasible and which will enable you to cope with the obstacles identified. This analysis of obstacles and resources may reveal that one program is more feasible than another and help you choose among interventions.

5. Make a formal plan for school improvement. Once you have specified goals and objectives, identified obstacles and resources that will influence your program, and selected a previously tested innovation, you are ready to make a formal plan for action. The plan should concretely specify

what resources will be used to overcome obstacles, and who is responsible for taking what steps by when. Whenever you overcome one of your obstacles, you meet a critical benchmark in the implementation of your program.

6. Specify quality control standards. Saying you have a program is not the same as having one. You must be specific about new policies and procedures. For instance, if you are putting new discipline procedures in place, clearly state the actions expected in response to specific offenses. Of course guidelines may not apply in every instance, so quality control standards might specify that disciplinary actions will accord with the guidelines, say, 80% of the time.

7. Evaluate. No school improvement program is complete without evaluation. Once you have made plans using the foregoing steps, you have a framework for evaluation. Were the steps the plan spelled out actually taken? Were the guidelines for the innovation followed? The climate assessment using the ESB that was used to formulate the initial diagnosis of the school's problems is a ready-made tool for learning if the program is effective. Periodic assessment is a straightforward way to chart progress and demonstrate the effectiveness of new programs. If school safety was identified as a problem, and the diagnosis implied that a lack of rule clarity contributed to this problem, then improvements

in safety and rule clarity should be visible in the results of a new climate assessment with the ESB.

School Discipline Can be Made to Improve

I want to reassure you that careful planning and the implementation of sound programs can lead to safer schools. Figure 9 summarizes some information about the improvements made in a number of schools participating in the School Action Effectiveness Study, an evaluation of seventeen school-based delinquency prevention projects sponsored by the Office of Juvenile Justice and Delinquency Prevention (G. D. Gottfredson, 1982; G. D. Gottfredson, D. C. Gottfredson, & Cook, 1983). It compares victimization, classroom disorder, and perceptions of safety in 1981 and in 1983, after the projects had operated for two years. Although it is possible that these improvements in school orderliness simply reflect general improvements in the orderliness of schools in general over this time period, I regard this as unlikely. Our impression is that a major feature distinguishing projects that demonstrated improvements in discipline in the OJJDP program from those that did not is the attention to faithful and thorough implementation of their interventions.

References

Cabinet Council on Human Resources Working Group on School Violence/Discipline (1984). Disorder in our public schools. Memorandum reprinted in F. S. Calhoun & M. L. Carnes (Eds.), Discipline in the public schools: Educator responses to the Reagan administration policies (Educational Research Service School Research Forum, pp. 9-27). Arlington, VA: Educational Research Service.

Cook, M. S. (1984, August). A comparative evaluation of two school-based peer group interventions. Paper prepared for presentation at the annual meeting of the American Psychological Association, Toronto.

Gottfredson, D. C. (1984, August). Environmental change strategies to prevent school disruption. Paper prepared for presentation at the annual meeting of the American Psychological Association, Toronto.

Gottfredson, G. D. (Ed.). The school action effectiveness study: First interim report (Report No. 325). Baltimore: Johns Hopkins University, Center for Social Organization of Schools, 1982. (ED 222 835)

Gottfredson, G. D. (1984). Testimony before the Subcommittee on Elementary, Secondary, and Vocational Education, U.S. House of Representatives, 23 January 1984, on the topic of School Disorder. In Oversight on school discipline (pp. 3-45). Washington, DC: U.S. Government Printing Office, 1984. (Reprinted in F. S. Calhoun & M. L. Carnes (Eds.), Discipline in the public schools: educator responses to the Reagan administration policies. Arlington, VA: Educational Research Service, School Research Forum, April 1984, pp. 64-87.)

Gottfredson, G. D. (In press a). A theory-ridden approach to program evaluation: A method for stimulating researcher-implementer collaboration. American Psychologist.

Gottfredson, G. D. (In press b). The Effective School Battery: User's manual. Odessa, FL: Psychological Assessment Resources.

Gottfredson, G. D., Gottfredson, D. C., & Cook, M. S. (Eds.). The School Action Effectiveness Study: Second interim report (Report No. 342). Baltimore: The Johns Hopkins University, Center for Social Organization of Schools, 1983.

Gottfredson, G. D., Rickert, D. E., Gottfredson, D. C., & Advani, N. (In press). Standards for Program Development Evaluation plans. Psychological Documents.

Hyman, I. A. (1984, August). School psychology and school discipline: Reaganspeak in 1984. Paper prepared for presentation at the annual meeting of the American Psychological Association, Toronto.

Peer, R. (1984, January 1). Reagan expected to present plan to fight crime in public schools. New York Times, pp. 1, 19.

Weisman, S. R. (1984, January 8). U.S. plans to fight crime in schools: Discipline will be backed up, Reagan says in address. New York Times, pp. 1, 21.

Figures 1 - 4: Illustrative Effective School Battery (ESB) Profiles for an Urban Junior High School

Figure 1

SCHOOL PSYCHOSOCIAL CLIMATE TEACHER REPORTS

MEASURE	PERCENTILE	VERY LOW	LOW	MODERATELY LOW	AVERAGE	MODERATELY HIGH	HIGH	VERY HIGH
SAFETY	1	×						
MORALE	6		×					
PLANNING AND ACTION	7		×					
SMOOTH ADMINISTRATION	23			×				
RESOURCES	31				×			
RACE RELATIONS	42				×			
PARENT / COMMUNITY INVOLVEMENT	53				×			
STUDENT INFLUENCE	11		×					
AVOIDANCE OF THE OF GRADES AS A SANCTION	2	×						

IMPROVEMENT NEEDED — VERY GOOD

Figure 2

SCHOOL PSYCHOSOCIAL CLIMATE STUDENT REPORTS

MEASURE	PERCENTILE	VERY LOW	LOW	MODERATELY LOW	AVERAGE	MODERATELY HIGH	HIGH	VERY HIGH
SAFETY	9		×					
RESPECT FOR STUDENTS	26			×				
PLANNING AND ACTION	10		×					
FAIRNESS OF RULES	46				×			
CLARITY OF RULES	67					×		
STUDENT INFLUENCE	40				×			

IMPROVEMENT NEEDED — VERY GOOD

BEST COPY AVAILABLE

Figure 3

SCHOOL POPULATION TEACHER CHARACTERISTICS

MEASURE	PERCENTILE	VERY LOW	LOW	MODERATELY LOW	AVERAGE	MODERATELY HIGH	HIGH	VERY HIGH
PRO-INTEGRATION ATTITUDE	50				×			
JOB SATISFACTION	2	×						
INTERACTION WITH STUDENTS	41				×			
PERSONAL SECURITY	11		×					
CLASSROOM ORDERLINESS	9		×					
PROFESSIONAL DEVELOPMENT	14			×				
NONAUTHORITARIAN ATTITUDES	30			×				

IMPROVEMENT NEEDED — VERY GOOD

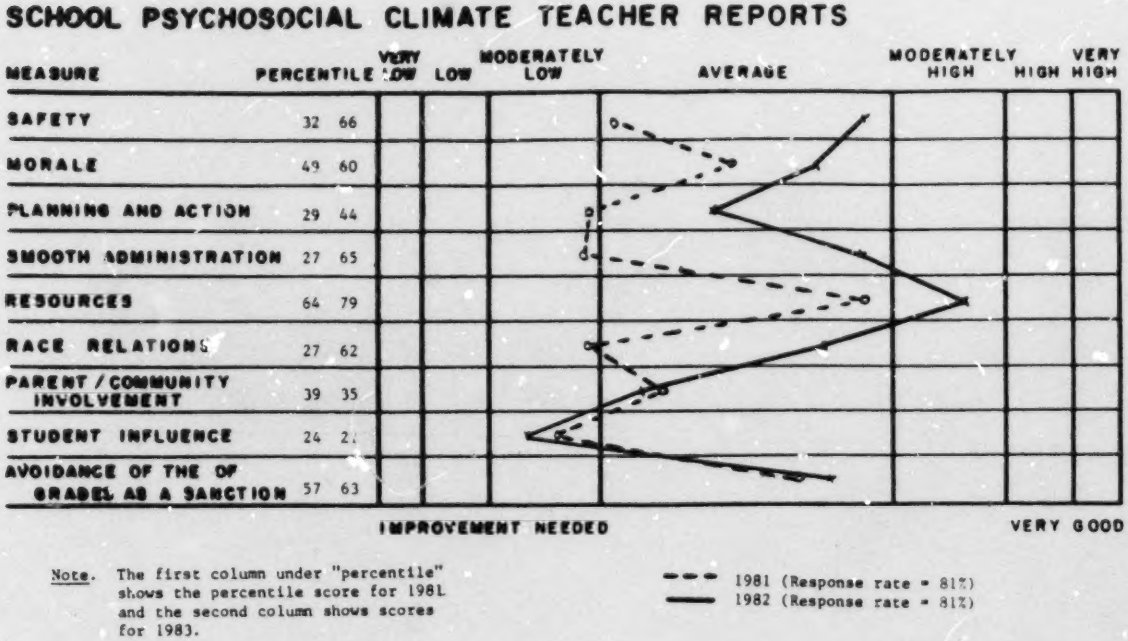
Figure 4

SCHOOL POPULATION STUDENT CHARACTERISTICS

MEASURE	PERCENTILE	VERY LOW	LOW	MODERATELY LOW	AVERAGE	MODERATELY HIGH	HIGH	VERY HIGH
PARENTAL EDUCATION	56				×			
POSITIVE PEER ASSOCIATIONS	52				×			
EDUCATIONAL EXPECTATION	60				×			
SOCIAL INTEGRATION	5	×						
ATTACHMENT TO SCHOOL	47				×			
BELIEF IN RULES	51				×			
INTERPERSONAL COMPETENCY	26			×				
INVOLVEMENT	24			×				
POSITIVE SELF-CONCEPT	50				×			
SCHOOL EFFORT	31				×			
AVOIDANCE OF PUNISHMENT	6	×						
SCHOOL REWARDS	22			×				

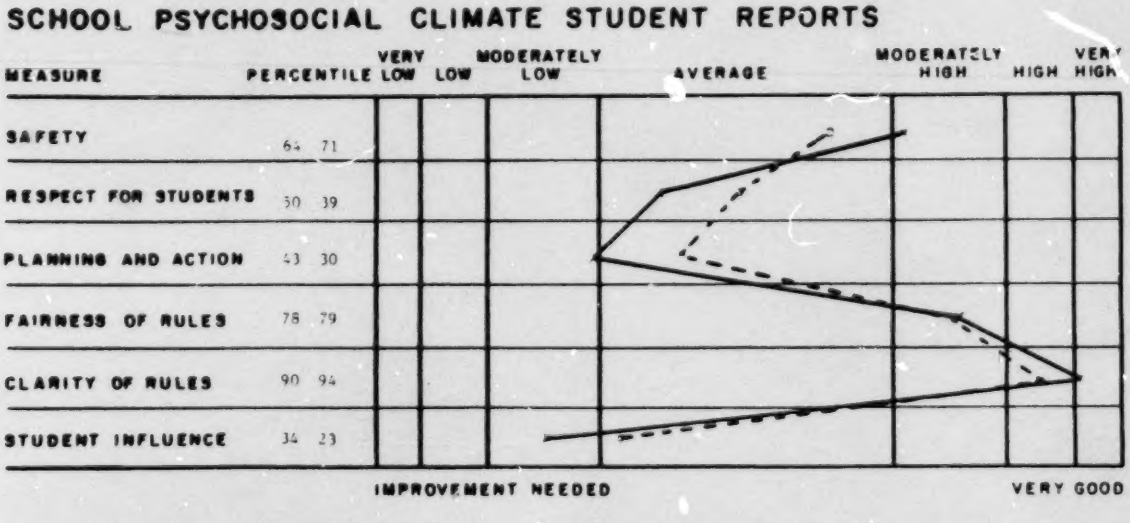
IMPROVEMENT NEEDED — VERY GOOD

Figure 5: A Junior High School Assessed with the ESB in 1981 and 1983



Note. The first column under "percentile" shows the percentile score for 1981 and the second column shows scores for 1983.

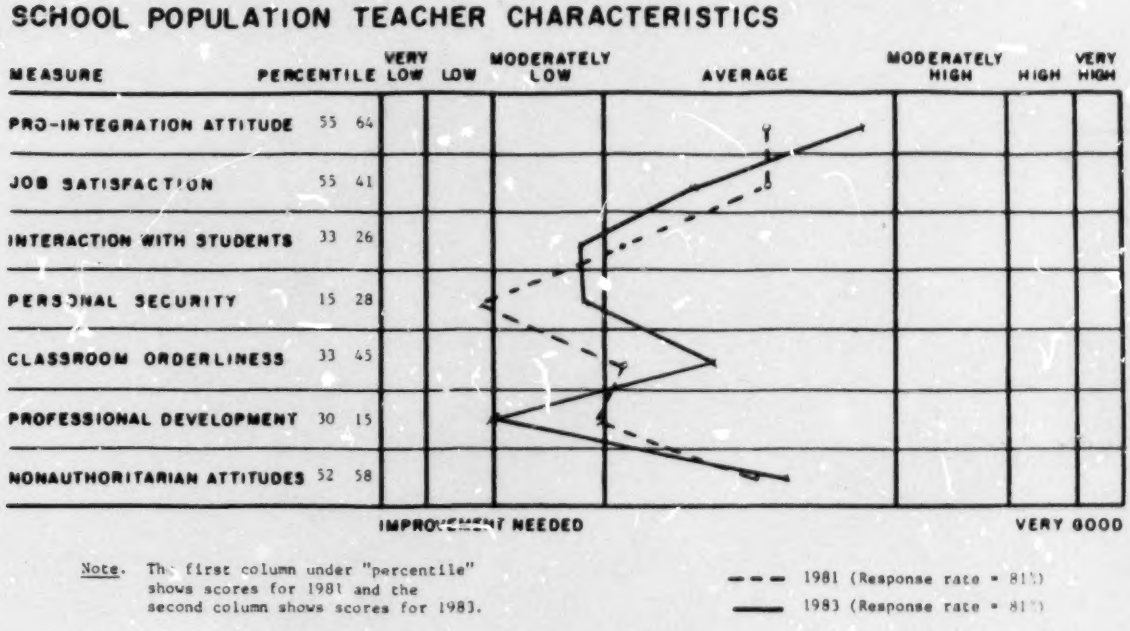
Figure 6: A Junior High School Assessed with the ESB in 1981 and 1983



Note. The first column under "percentile" shows scores for 1981 and the second column shows scores for 1983.

BEST COPY AVAILABLE

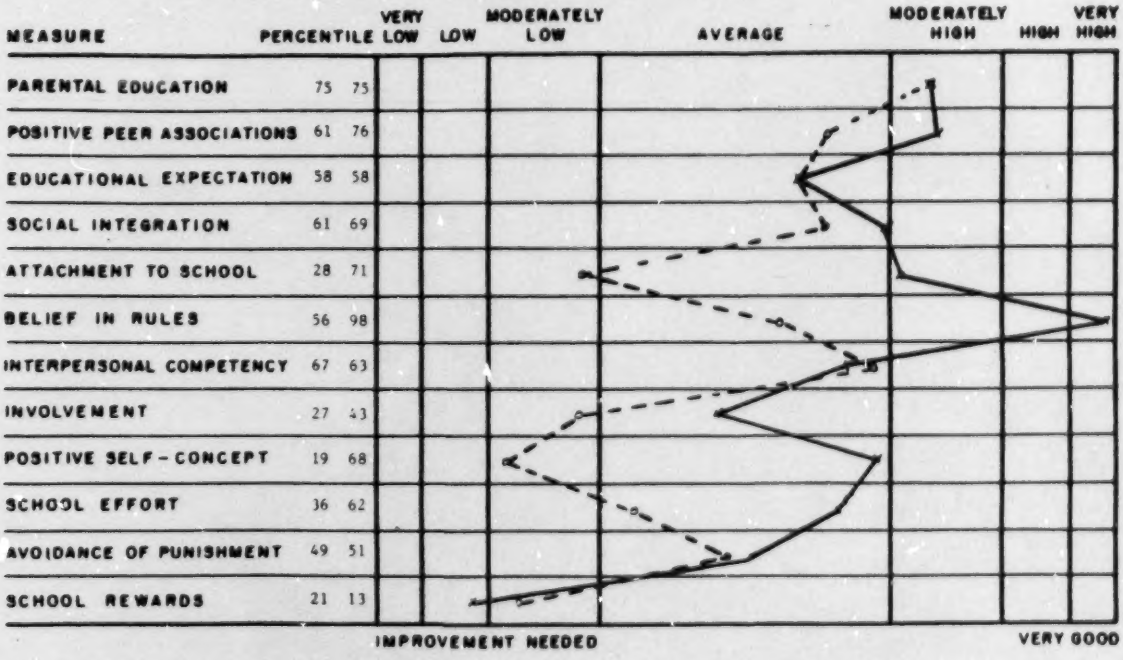
Figure 7: A Junior High School Assessed with the ESB in 1981 and 1983



Note. The first column under "percentile" shows scores for 1981 and the second column shows scores for 1983.

1981 (Response rate = 81%)
1983 (Response rate = 81%)

Figure 8 A Junior High School Assessed with the ESB in 1981 and 1983



Note. The first column under "percentile" shows scores for 1981 and the second column shows scores for 1983.

1981 (Response rate = 76%)
1983 (Response rate = 76%)

BEST COPY AVAILABLE

Figure 9

CAN SCHOOLS REALLY BE MADE SAFER?

THE EXPERIENCE OF SCHOOLS IN THE SCHOOL ACTION EFFECTIVENESS STUDY:

STUDENT VICTIMIZATION	
VICTIMIZATION DOWN	16 SCHOOLS
VICTIMIZATION UP	7 SCHOOLS
TEACHER VICTIMIZATION	
VICTIMIZATION DOWN	27 SCHOOLS**
VICTIMIZATION UP	4 SCHOOLS
CLASSROOM DISRUPTION	
DECREASED	25 SCHOOLS**
INCREASED	7 SCHOOLS
STUDENT PERCEPTIONS OF SAFETY	
SAFETY INCREASED	15 SCHOOLS**
SAFETY DECREASED	1 SCHOOL
TEACHER PERCEPTIONS OF SAFETY	
SAFETY INCREASED	21 SCHOOLS*
SAFETY DECREASED	8 SCHOOLS

Note. Preliminary results from the School Action Effectiveness Study. Number of schools differs for the different comparisons because comparable data are not available for all measures.

* $p \leq .05$
** $p \leq .01$